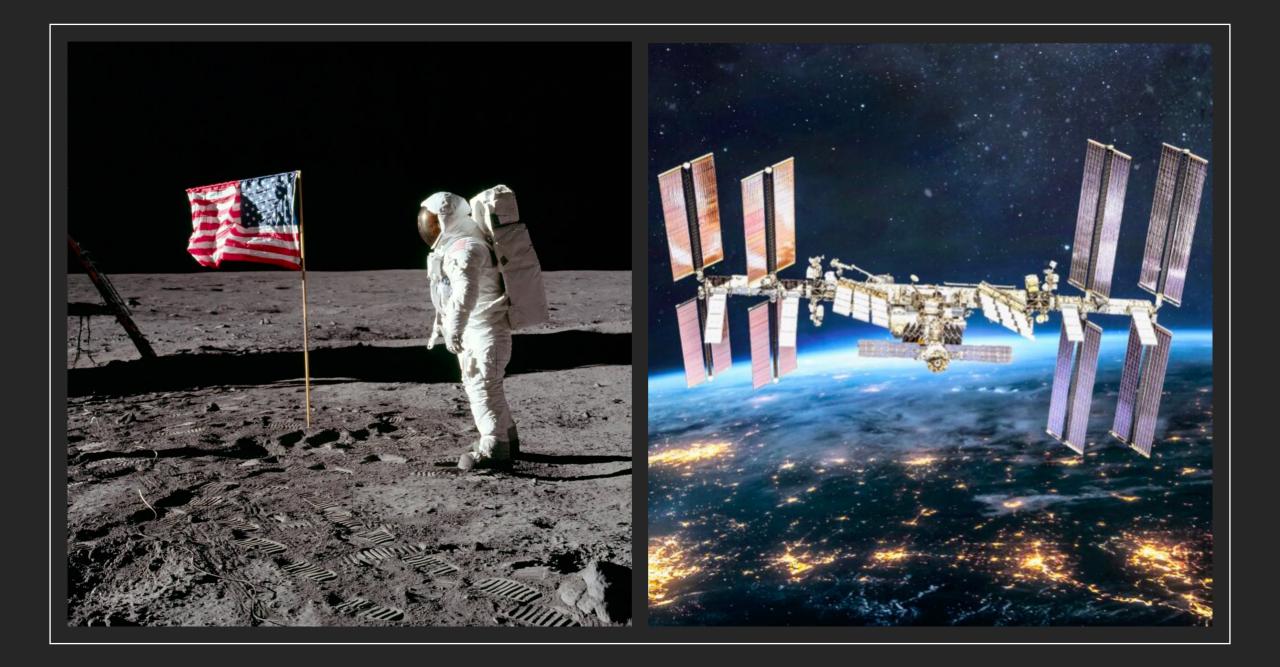


# The Mineral Foundations of Green Energy Transitions

## **Cullen S. Hendrix**

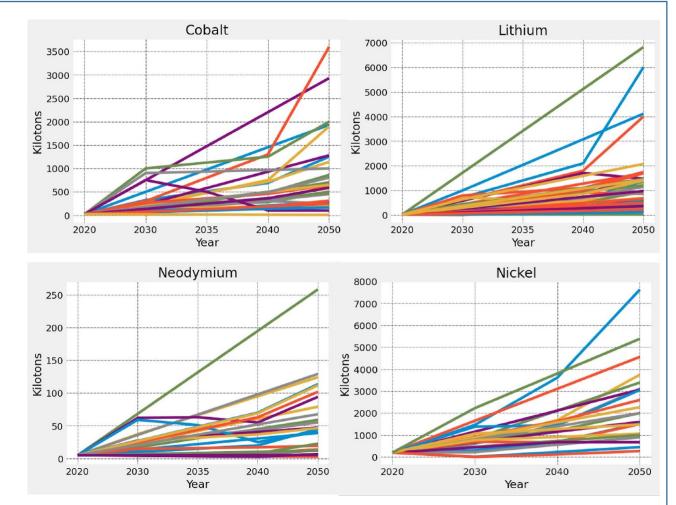
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## **Three stylized facts**

- Anticipated demand for minerals is high – but also uncertain
- China is the pivotal actor a triumph of geoeconomics over geology
- USA and other AEs are playing catchup to "de-risk" – and using competing industrial policies to do so



Calderon et al. (2024) Critical mineral demand estimates for low-carbon technologies: What do they tell us and how can they evolve? **Renewable and Sustainable Energy Reviews.** Slightly modified from original.



### What do "we" need

- 1. Clearer priorities and economic thinking
- 1. New trade agreements with "friends" old and new
- 1. Diversification and de-risking, yes de-Chinafication, no





## Thank you.

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